

# Times Tables



TimesTables teaches the basics of multiplication with an emphasis on learning the times tables and becoming very fast at recalling multiplication facts.

TimesTables has three distinct learning modes: a times tables grid, flash cards, and an animated apple orchard. The 12 x 12 grid shows multiplication facts in a table giving the student a visual representation of the times tables. Students can tap each fact to view and listen to the multiplication product. The flash cards allow a student to train themselves on their multiplication facts by swiping through flash cards and tapping the cards to view and listen to the answers. The animated apple orchard teaches the concept of multiplication by showing a number of trees each with a number of apples. Students can tap the trees to skip-count the apples in groups.

TimesTables also has a game mode which tests the student's recall of multiplication facts with timed drills of sequential or random multiplication problems. The unique keyboard entry forces the student to enter the correct answer instead of choosing from a set of answers. Scores are tracked for multiple players and displayed on a high score board. All settings are stored on a per-player basis to facilitate learning by all members of a family.

Beginner	Intermediate	Expert
<p>This is an introduction to the multiplication table and facts. There are three different views to introduce students to multiplication facts.</p> <p>Press <b>LEARN</b> to access the learning tools.</p> <p>A. Times Table Grid - Slide your finger across the table and pinch with two fingers to zoom in and out. Press a multiplication fact to view the multiplication equation and to have TimesTables speak the equation out loud.</p> <p>B. Flash Cards - swipe up, down, left and right to cycle through the cards. Tap cards to speak the equation. Double-tap to flip cards and view the answers. Triple-tap or shake for a random card.</p> <p>C. Apple Trees Orchard - choose the number of trees and the number of apples to view an orchard of apple trees. Tap each tree to skip-count the apples. Shake to reset the skip-counting.</p>	<ol style="list-style-type: none"><li>1. Touch the <b>PLAYER</b> button to choose a different student or add a new student.</li><li>2. Press <b>PLAY</b> and then select <b>TIMES TABLE DRILL</b>.</li><li>3. Select the multiplier or multiplicand. You can turn on Scramble if you want to scramble the problems. You can also Swap multipliers. Then select the multiplication drill you would like to practice.</li><li>4. When the student has finished a particular drill, have them touch Record Score. The number correct, wrong, and time are displayed. Have the students write down these numbers in a journal to record the scores. As they continue, they should see the number correct increase and the total time decrease.</li></ol>	<ol style="list-style-type: none"><li>1. Touch the <b>PLAYER</b> button to choose a different student or add a new student.</li><li>2. Press <b>PLAY</b> and then select <b>RANDOM PROBLEMS</b>.</li><li>3. Select the multiplier or multiplicand. Then select the number of random problems.</li><li>4. When the student has finished a particular drill, have them touch Record Score. The number correct, wrong, and time are displayed. Have the students write down these numbers in a journal to record the scores. As they continue, they should see the number correct increase and the total time decrease.</li></ol>

# Addressed TEKS

## Grade 3

(4) Number, operation, and quantitative reasoning. The student recognizes and solves problems in multiplication and division situations. The student is expected to:

- (A) learn and apply multiplication facts through the tens using concrete models;
- (B) solve and record multiplication problems (one-digit multiplier);

(6) Patterns, relationships, and algebraic thinking. The student uses patterns to solve problems. The student is expected to:

- (A) identify and extend whole-number and geometric patterns to make predictions and solve problems;
- (B) identify patterns in multiplication facts using concrete objects, pictorial models, or technology; and
- (C) identify patterns in related multiplication and division sentences (fact families) such as  $2 \times 3 = 6$ ,  $3 \times 2 = 6$ ,  $6 \div 2 = 3$ ,  $6 \div 3 = 2$ .

## Grade 4

(4) Number, operation, and quantitative reasoning. The student multiplies and divides to solve meaningful problems involving whole numbers. The student is expected to:

- (C) recall and apply multiplication facts through  $12 \times 12$ ;
- (D) use multiplication to solve problems involving two-digit numbers and division. The student is expected to:
  - (A) use patterns to develop strategies to remember basic multiplication facts;

(6) Patterns, relationships, and algebraic thinking. The student uses patterns in multiplication and division. The student is expected to:

- (A) use patterns to develop strategies to remember basic multiplication facts;
- (B) solve division problems related to multiplication facts (fact families) such as  $9 \times 9 = 81$  and  $81 \div 9 = 9$ ; and
- (C) use patterns to multiply by 10 and 100.

## Grade 5

(3) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve meaningful problems. The student is expected to:

- (A) use addition and subtraction to solve problems involving whole numbers and decimals;
- (B) use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology);